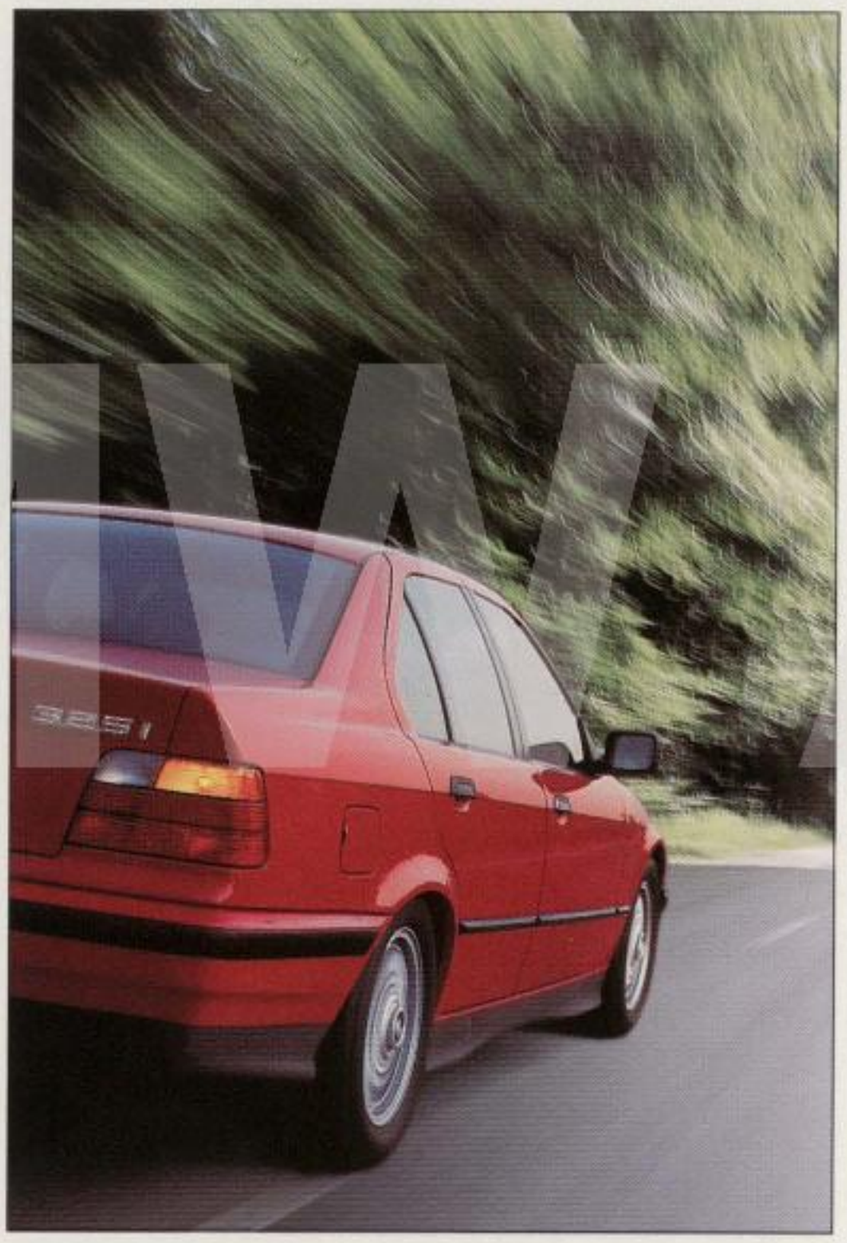
THE BMW 3 SERIES SALOONS



The BMW 3 Series: a unique success the world over.

THE STORY OF SUCCESS.

In the relatively short time since its debut in autumn 1990 the BMW 3 Series has already become the choice of more than half a million customers. Certainly a fascinating achievement in the exclusive compact range attributable entirely to the fact that the BMW 3 Series is a car developed consistently for the '90s. For this is a car with the up-to-date technology of the '90s and with truly unmistakable styling to reflect our modern times.

A car which provides sheer driving pleasure in its most compact form, and a car pointing consistently into the future of progressive motoring.

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The BMW 3 Series:
compact and comfortable, agile and safe.


BMW AG

The BMW 3 Series follows its own line:
from the low-slung front section to the striking rear end.


M PT 8707

The BMW 3 Series has received its efficient streamlining in the wind tunnel. But at the same time it has retained all of its unique character.


120
140
160
180
100
200
80
220
60
240
40
260
20
km/h
1/min
x1000
AIRBAG
R
L
BMW AG

The arched cockpit: driver-oriented,
businesslike and straightforward.

TRUE LEADERSHIP IN TECHNOLOGY.

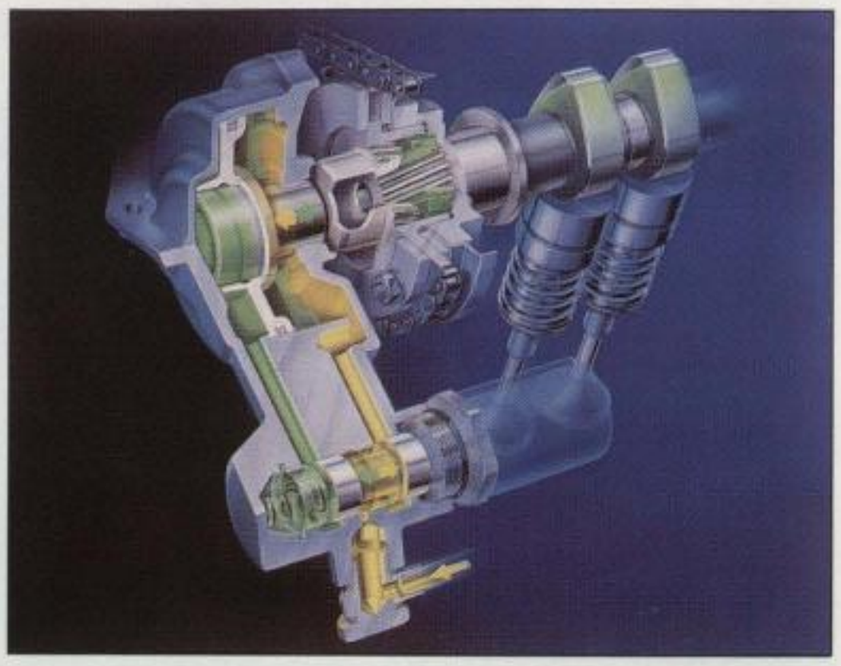
Just one look at the engine shows you the precision our engineers put into everything they do. BMW's six-cylinders now come with new pistons, new connecting rods and improved Digital Motor Electronics, with cylinder-specific knock control and variable camshaft adjustment for even better performance on even less fuel.

BMW would not be BMW if our engineers were satisfied with average or even mediocre achievements. On the contrary. For it is our objective to achieve a standard of road performance far above average, to maintain the lead in environmental technology where BMW has been a trendsetter for more than 20 years, and to give our cars both safe and dependable driving characteristics. To do so we take new approaches and set new standards. And this is by no means unusual in the history of BMW; indeed, it has always characterised our success and our unique BMW technology.

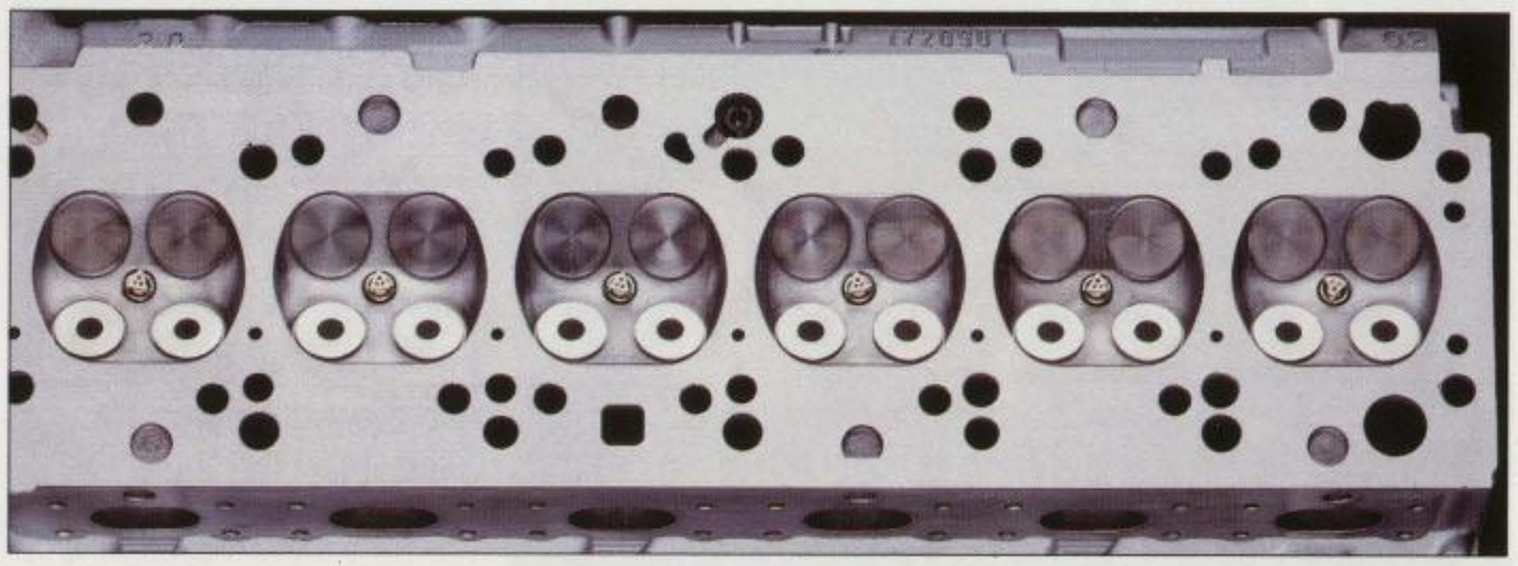
Successful engineering for a successful future. The outstanding precision and sophisticated engineering of BMW's two six-cylinders lauded time and again by the motoring press have now been further improved by new, decisive concepts. The new six-cylinders are even more powerful

and a lot more flexible than before. They consume less fuel, ensure even better emission control, and are quieter than their predecessors.

The reason for this consistent improvement is quite simple: We want to keep our cars just as superior in future as they are today. And we do this by constantly maintaining the latest standard in technology. The connecting rods are new — longer and stronger. The pistons are new — weighing almost 20 per cent less than before on the two-litre power unit. The entire valve drive is lighter, and the intake valves now come with two different opening points thanks to VACC, BMW's variable camshaft control: Depending on engine speed and accelerator position, VACC adjusts the intake valves on the camshaft hydraulically and mechanically by 12.5°. The result is not only extra engine refinement when idling and at low speeds, but also extra torque and acceleration at medium speeds. And all this is monitored and controlled by our latest Digital Motor Electronics, DME.



The perfect blend of a good idea and "intelligent" technology: Monitored by Digital Motor Electronics, variable camshaft control (VACC) in the BMW six-cylinders adjusts the intake valve camshaft hydraulically and mechanically by 12.5°. The result is extra refinement when idling and at low speeds, plus additional torque, flexibility and engine performance at medium speeds. Fuel consumption is reduced and emissions cut back to a minimum.



Four-valve technology refined to an even higher standard: The valves and the entire valve drive are even lighter and quieter than before. The entire engine runs even more smoothly and with extra refinement.

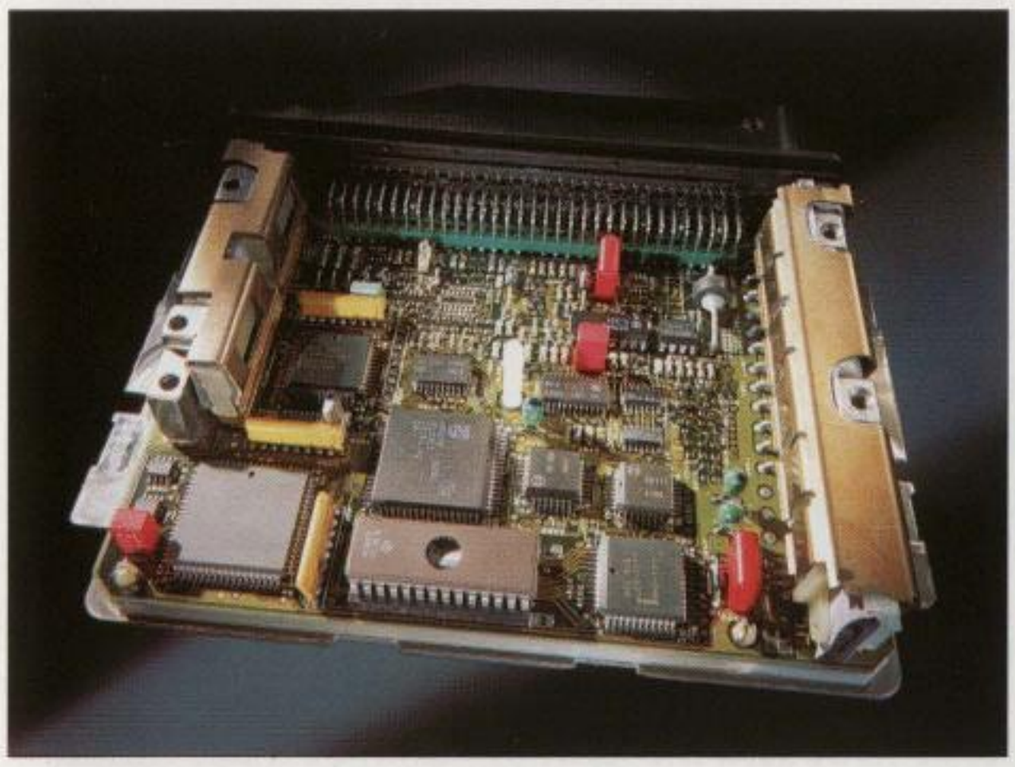
Reliable intelligence. With its artificial intelligence DME controls not only the new VACC system, but also the ignition timing via our new cylinder-specific knock control. And this gives you two advantages: First, knock control allows a higher compression ratio for even greater fuel efficiency. Second, it enables you to run the car on unleaded regular fuel

should you come across a filling station without unleaded premium.

A further feature of Digital Motor Electronics is that it now monitors the ignition current fed to each cylinder. So that if the power supply to one of the six coils happens to be interrupted, DME will cut off the fuel supply immediately to avoid damage to the catalytic converter caused by unburnt fuel.

The four-cylinder with running smoothness, performance and free-revving power typical of BMW. Other fortes are the very good efficiency, superior fuel economy and excellent emission control.

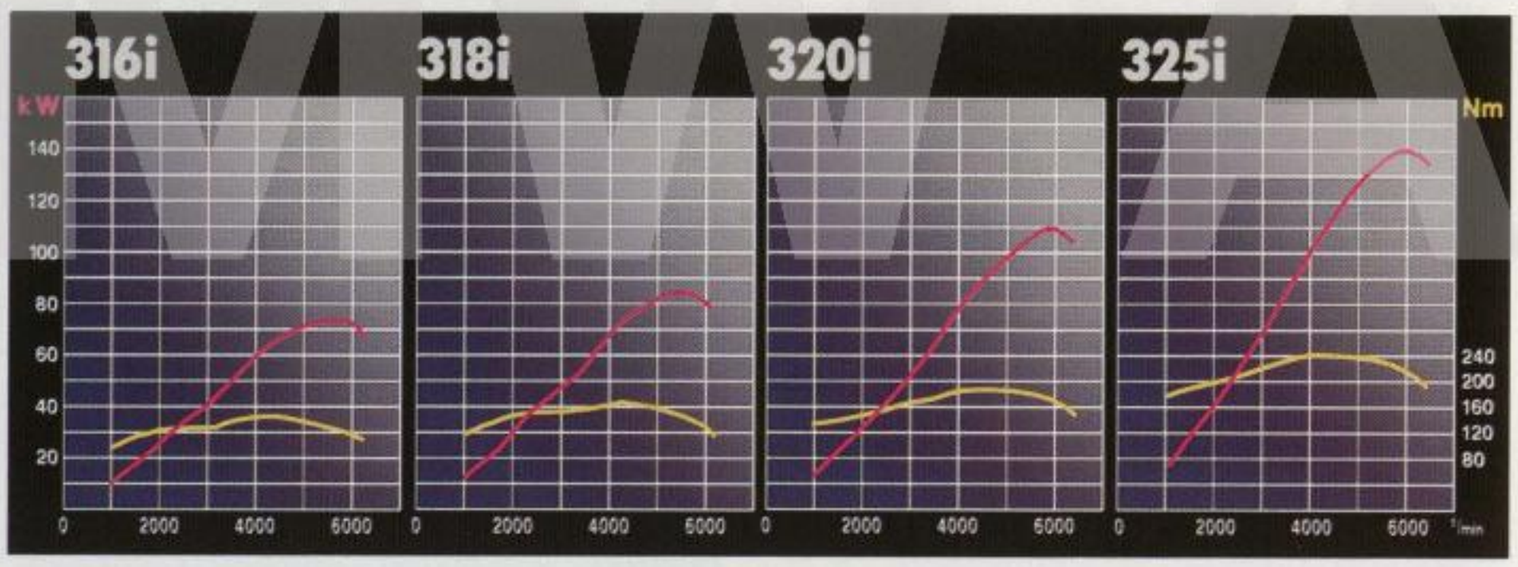
How four cylinders become a genuine BMW power unit. What's the use of superior know-how if you don't apply it in practice? To make sure we do apply this know-how, everything we have learnt in developing BMW's unique 12-cylinder has gone straight into our four-cylinder power units. The major components come directly from the 12-cylinder. The



Digital Motor Electronics (DME) controls all important functions of the engine and three-way catalytic converter fully electronically. It ensures a perfect fuel/air mixture and guarantees accurate ignition timing. Accordingly, power is provided consistently on a minimum amount of fuel and with minimum emissions.

lightweight pistons have asymmetric combustion chamber crowns as on the V12. And the cylinder head also has the same combustion chamber design as its "bigger brother". The result, as on the 12-cylinder, is a remarkably high standard of thermal efficiency for superior output and excellent torque relative to engine size, for genuine fuel efficiency and very good emission control. Even the electronic engine management is comparable to the unit used for the 12-cylinder, being modified only where necessary. The result of this refinement is an absolutely smooth, cultivated, high-revving and fuel-efficient straight-four displacing 1.6 or 1.8 litres.

The five-speed gearbox: The features that make it dynamic also make it economical. The motoring enthusiast will be happy to note how quickly and smoothly you can shift gears in the BMW 3 Series. How small the increments are between gears, thanks to the active overall transmis-



A characteristic feature of the 3 Series' engines: smooth torque curves (yellow) at a high level for powerful acceleration also from low and medium engine speeds. And steeply rising output curves (red) from 1000 to 6000 rpm.

sion ratio. And how short gear travel is from one position to another. When shifting up, after the gears have reached their maximum speed, the engine runs consistently in the best torque range — also in fifth gear. Because it has a direct 1:1 transmission ratio transferring power from the engine directly to the rear axle. As a result, there is no frictional loss on the gear wheels and oil temperatures remain reasonably low.

The active automatic transmission. Regard BMW's automatic transmission as what it really is: a fast-shifting automatic for ambitious and safe motoring, and a superior achievement of modern technology able to relieve the driver of routine chores. Because no matter how good

a manual gearbox may be, one task always remains: the need to constantly clutch and de-clutch, which may well be particularly strenuous in today's stop-and-go traffic. So the perfect solution, without doubt, is the optional automatic transmission on the BMW 3 Series: four-speed automatic for the four-cylinder, five-speed automatic for the six-cylinder models.

A BMW automatic transmission shifts gears far more intelligently, quickly and smoothly. And depending on road speed, engine speed, vehicle load and road gradient, the transmission automatically selects the best gear. On average, fuel consumption is no higher than with a manual gearbox.

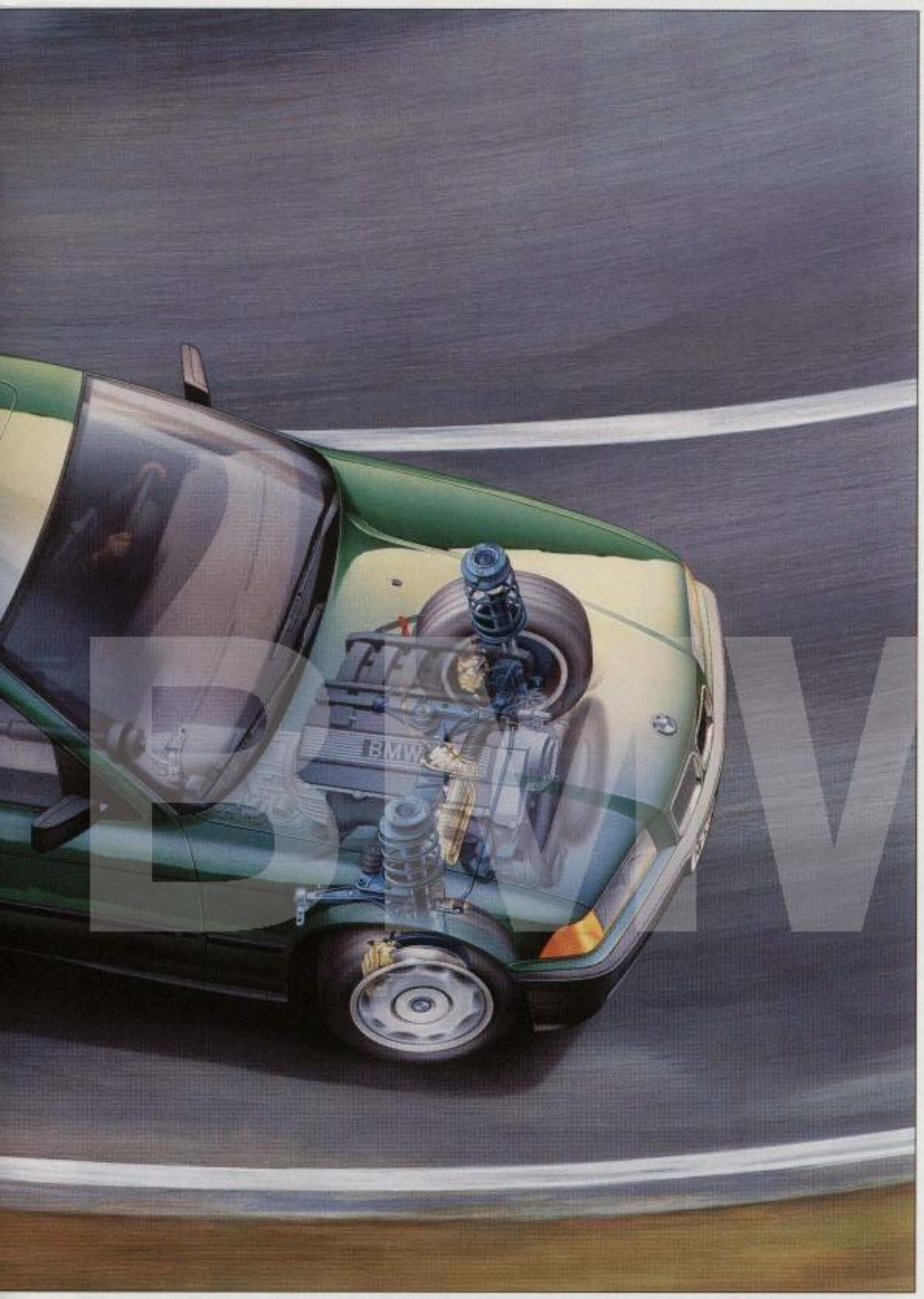
Despite all these advantages, you yourself still decide on how the transmission operates: either in a sporting (S) or economic (E) style, controlled by the switch next to the selector lever. The E(conomy) program shifts up at an early point to minimise fuel consumption, while the S(port) program revs up the gears whenever necessary in order to activate the engine's power reserves. And the electronic control unit determines the best shift point in each case.

With electronic/hydraulic (EH) control you can even choose a third program: Either winter program (❄) on the five-speed automatic transmission for setting out smoothly and shifting gears without the slightest jolt on slippery roads, or program M on the four-speed automatic trans-

The dynamic way to drive with maximum comfort. Carefully tuned to the extremely rigid bodyshell, the suspension of the BMW 3 Series offers a standard of handling absolutely unprecedented in the exclusive compact range. Superior safety thanks to the wide track

mission for smooth motoring on snow, sludge and slippery roads without the wheels spinning.

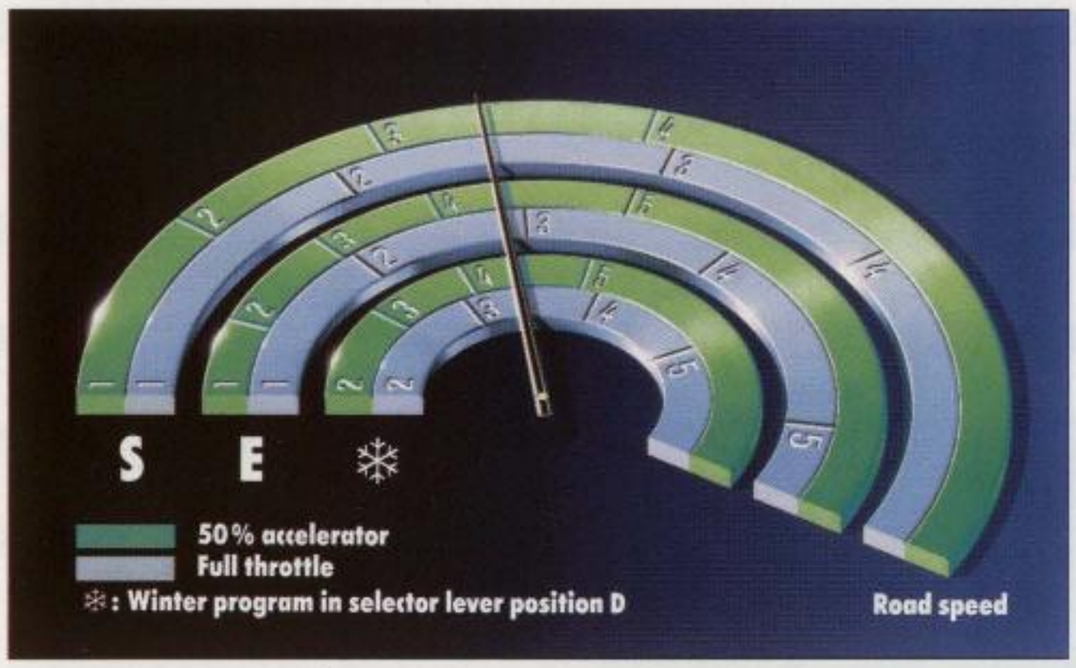
The BMW feeling today. Just as the character of a BMW is not shaped in the wind tunnel, the characteristic driving behaviour of a BMW is not determined exclusively by the computer, even if it does apply the world's most sophisticated simulation programs. True, the computer is obviously very helpful in examining new suspension systems. But we know from experience that there is only one way to achieve above-average performance: To have ideas, to implement these ideas in practice and then to optimise them in real-life driving tests. Consistent improvement and refinement until everybody — from the engineer to the test driver — agrees that this is it. This is what perfection is all about.



and long wheelbase. Excellent traction and very good directional stability, also when applying the brakes. High speeds in bends thanks to the patented central-arm rear axle exactly matched to the single-joint spring strut front axle.

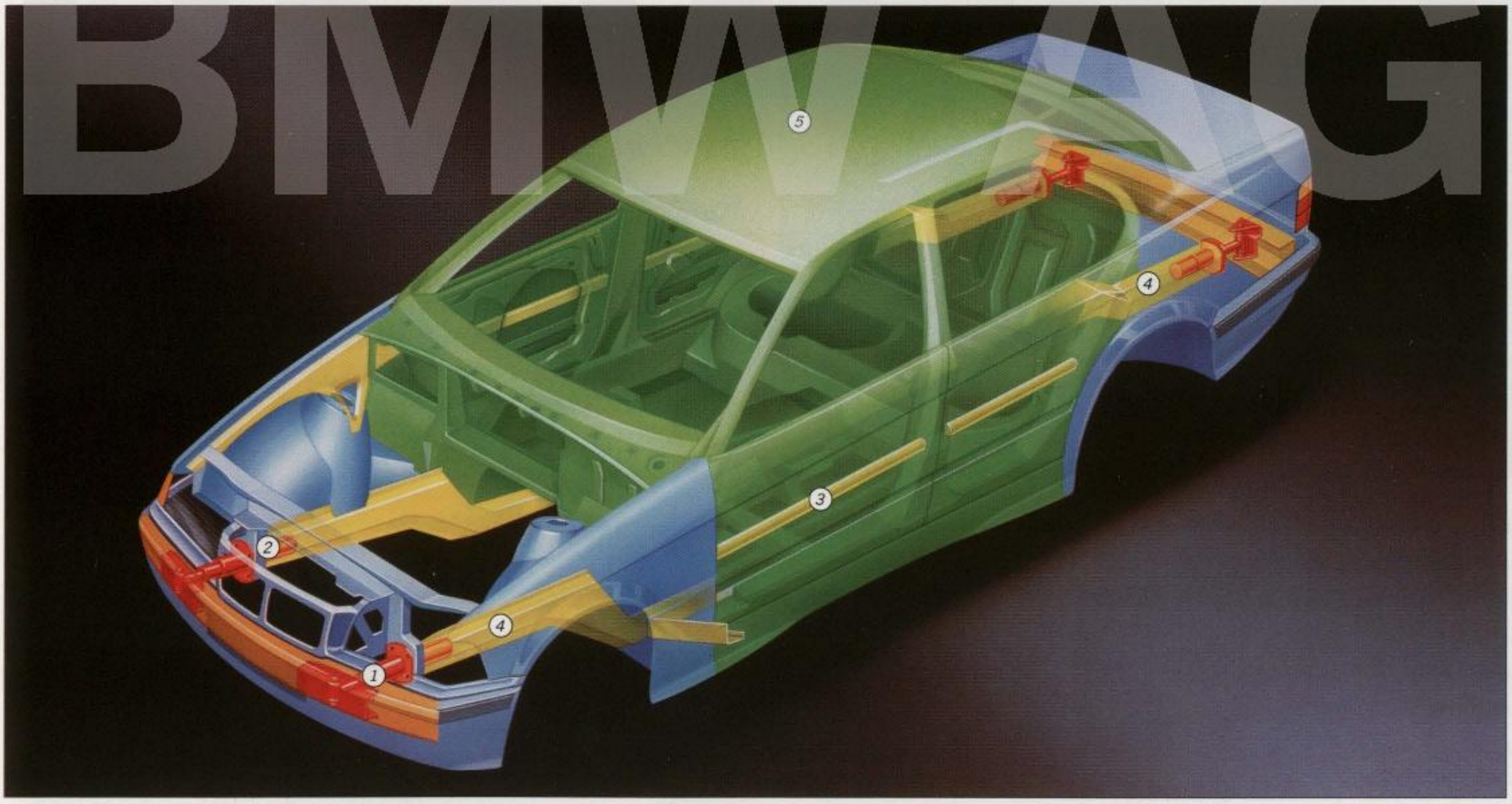
The supreme art of our engineers is their ability to combine different, in some cases quite contradictory, demands made of a car's chassis — it must be safe, it must be comfortable, it must offer precise handling. The result is a truly excellent, smooth and harmonious experience on the road. And this is precisely why the suspension of the BMW 3 Series is so elaborate in its design. Some of its typical features are the spring strut front axle and patented central-arm rear axle. The wide track and long wheelbase providing secure roadholding and an excellent grip. The twin-sleeve gas pressure shock absorbers and asymmetric coil springs at

BMW automatic transmission with EH control on the 320i and 325i. You choose the driving program, the electronic control unit calculates the shift points, and the hydraulic system actuates the gears. Presenting the three driving programs S, E and ❄, the graph shows the respective shift points as a function of road speed with the gas pedal half down (green) and pressed fully to the floor (blue).



the front. The extra-large disc brakes at the front (or even front and rear from the 320i, with inner-vented front wheels) and the BMW anti-lock brake system fitted as standard. The pleasant and, in particular, safe feeling when driving a BMW 3 Series, its outstanding directional stability, superior precision in bends and minimum body sway even on fast, winding roads, the efficient anti-dive effect, the exact feel of the steering — all these features set standards in the exclusive compact range.

The safety-first bodyshell:
1. Reversible, hydraulic impact absorbers.
2. Deformation units easy to replace at minimum cost.
3. Side-impact protection.

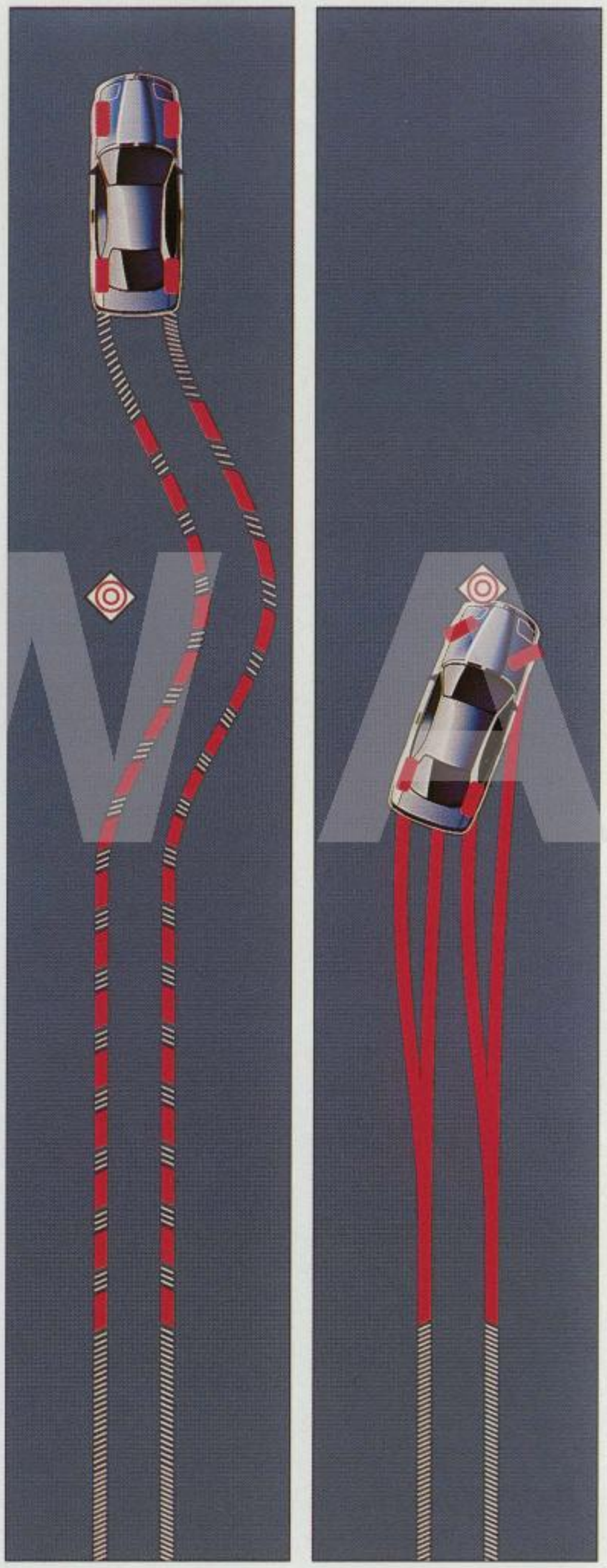


4. Stable supports and reinforcement members.
5. The extremely strong passenger cell.

The unique safety concept available only from BMW. The BMW F.I.R.S.T. (Fully Integrated Road Safety Technology) safety concept carefully coordinates all the systems crucial to active and passive safety on the

road. Passive safety is ensured by the care, precision, consistency, ideas and quality we put into all features protecting the driver and his passengers.

In the event of a head-on collision energy is absorbed systematically. Minor impacts at low speeds up to 4 km/h hardly cause any damage, crash energy being absorbed by reversible impact absorbers. In collisions up to 15 km/h damage is restricted to the deformation units in the front section easy and inexpensive to replace. And the passenger cell remains largely undamaged even in collisions up to 56 km/h. In fact, this survival area is so stable that you can still open the doors after the car has rolled over three times. Another aspect of passive safety is the airbag steering wheel standard on all models.



Fitted as standard, BMW four-sensor ABS ensures maximum safety when applying the brakes. Even when braking all-out on a wet road, you remain fully in control of your BMW 3 Series and can safely avoid virtually every dangerous situation.

Genuine BMW style with technical perfection to the last detail.
Plus the most skilful finish of top-quality materials.

INNER QUALITIES.

Quality is no coincidence. On the contrary, the only way to achieve top quality is through target-oriented consistency in the design and construction of a car. And here we have the big advantage that our engineers benefit from decades of experience in research and development particularly in the area of luxury performance saloons.

The driver-oriented cockpit of the BMW 3 Series is arched slightly around the driver for obvious reasons: All controls and switches are within easy reach to the right and left of the steering wheel, meaning you do not have to bend forwards to switch on the lights or control the heating.

Ergonomics BMW-style in the 3 Series. What would happen if you stopped reading this brochure and sat down at the wheel of a BMW 3 Series instead? First, you start the engine. Second, you focus immediately on BMW's unique, easy-to-read instruments such as the Service Interval Indicator and the circular dials for the speedometer and rev counter, the fuel gauge and coolant temperature indicator. All the important information is exactly where it should be, right in the driver's primary field of vision. All the controls and switches are directly in front of you, unmistakable and efficient in their functions. Depending on their significance and frequency of use, they are exactly where they should be. So that in a

nutshell you will find that making yourself acquainted with the BMW 3 Series takes less time than reading these lines.

The most important dials and displays in clear, classic circular design right in front of the driver: the speedometer, rev counter with Energy Control (optional on 316i), fuel gauge and coolant temperature indicator.

The BMW cockpit. The cockpit of the BMW 3 Series is designed in arched arrangement around the driver, keeping distances between the driver and the controls much shorter for extra safety. So in a BMW you don't have to bend forward to operate, say, the lights switch on the left-hand side. On the right-hand side, in the middle of the driver-oriented centre console, you will find the rotary knobs for warm air, fresh air and air flow distribution placed most conveniently right above the gearshift lever. As an option you can have the centre console equipped with a radio developed especially for BMW and, from the 320i, with an on-board computer informing you of your time of arrival, average fuel consumption and average speed, and allowing you whenever you wish to determine the time required for a certain distance or journey.

The driver-oriented centre console can be equipped to meet all your personal requirements, with one of BMW's 6 radios and the on-board computer (from the 320i). Another highlight of the centre console is the electronically controlled air conditioning with separate temperature control left and right.

BMW comfort. The first thing you will notice about the seats in your BMW is the quality of the fabric: classic, beautiful and soft flock upholstery. But in choosing this top-quality material we concentrate on more than just good looks and refinement. Accordingly, the fabric and all the components of a BMW's seats are tested just as thoroughly as, say, our engines.

The second thing you will notice about the seats is the high backrest and very good thigh support. The entire seat fits the contours of your body snugly and harmoniously. And adjusting the seat for length, backrest

angle, and even height on the driver's side is both simple and convenient.

But the best thing about the seats of your BMW will not become obvious at first sight and will not even make itself felt the first time you try out the car. Rather, it takes a long drive to really appreciate the excellent side support increasing towards the edge of the seats. For this is

Compact outside, spacious inside with lots of room — also legroom! — for the rear seat passengers. Everything reflects BMW's particular style: modern, clear-cut and businesslike to provide a relaxed atmosphere of superior motoring.

precisely the kind of support you require, for example, in long bends on the autobahn and on narrow, winding roads in the mountains.

BMW seat belts. Fastening your seat belt in a BMW, you won't be able to tell the difference to begin with from any other seat belt. Only the rear seats will require a moment of reflection, BMW's ergonomic belt system fitting into latches at the outside of the seats and not in the middle.

The first point is that this is more practical when fastening your seat belt. The second point is that the belts can be unlocked more quickly also from outside — an important advantage should you require help urgently, for example after an accident. In such a situation it is good to know that not only the doors, but also the seat belts, can be opened quickly and easily.

BMW safety belts on the front seats now come as standard with a belt latch tensioner. Activated by a sensor the latch secures the belt so

tightly within fractions of a second that your upper body will hardly move forward at all in the event of an impact. The anti-submarining ramp on the seat bottom ensures at the same time that you cannot slide beneath your seat belt.

As an option the BMW 3 Series comes with a through-loading system substantially enlarging the luggage compartment. The rear seat backrest is subdivided in the middle and may be tilted forward either completely or on one side.

BMW airbag fitted as standard. For maximum safety in what may be the 30 most important milliseconds in your life, every BMW now comes as standard with an airbag steering wheel. For accident researchers agree that in conjunction with your seat belt featuring a latch tensioner, the airbag offers maximum safety in the event of a head-on collision. No other technology currently available can give you better protection for your face, head and upper body.

The very instant the BMW airbag sensors determine an impact above a certain limit, an electric circuit is closed and the airbag inflates to full size, softly cushioning your head and upper body within fractions of a second.

A separate diagnostic unit constantly monitors the airbag to make sure it is always ready for operation, and a special telltale keeps you properly informed that everything is in perfect order. A sophisticated and reliable system all round.

Fitted as standard, the driver airbag ideally supplements the BMW seat belt with belt latch tensioner.

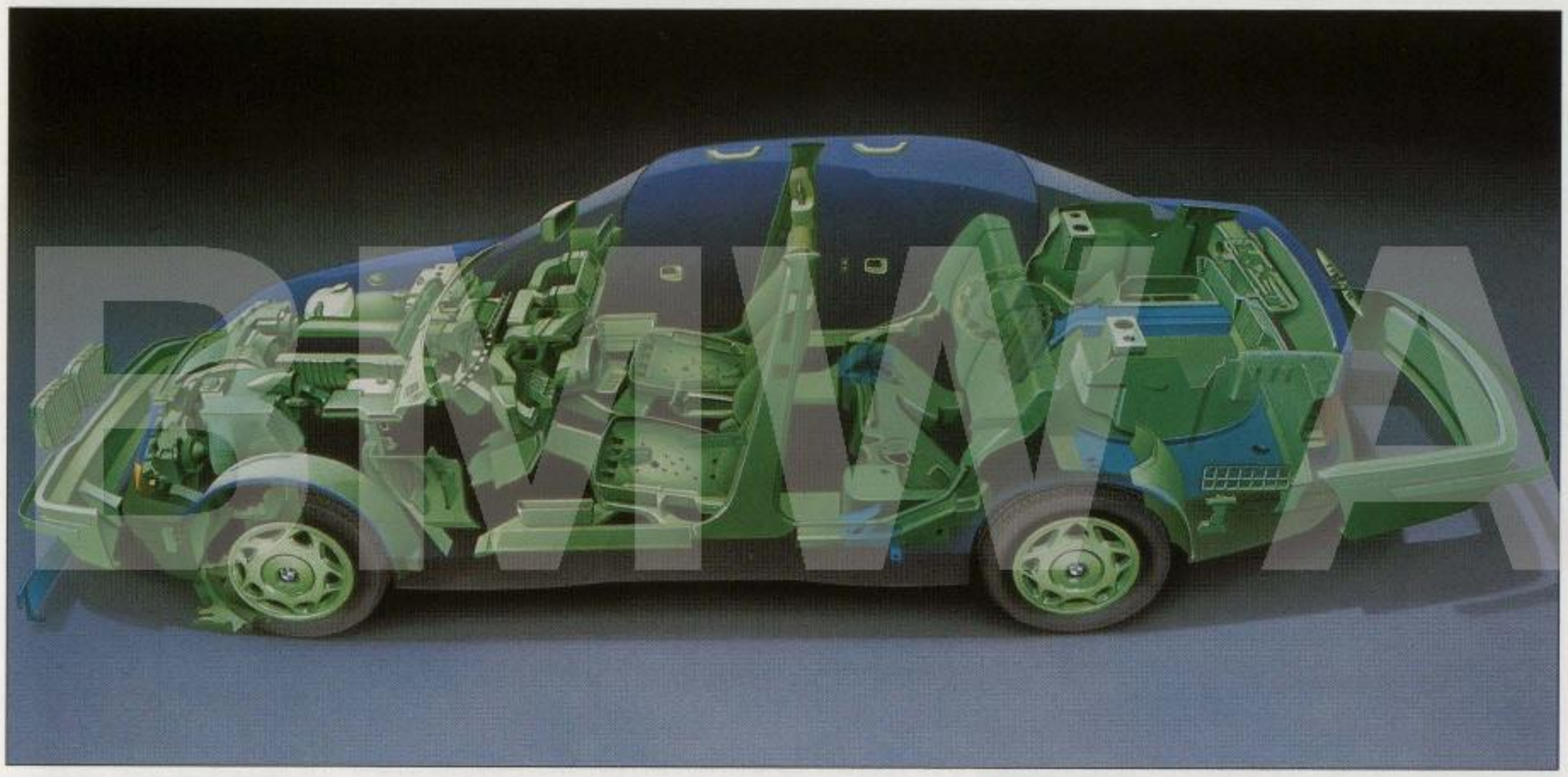
Ensuring an ideal climate inside the car. Apart from the good handling of the BMW 3 Series, the ergonomic design of the cockpit, the safe, body-contoured seats, and the use of top-quality materials throughout the interior, we feel that the highly efficient heating and ventilation system is particularly important for your well-being. No fewer than 16

large air ducts supply fresh and warm air to the interior, flowing quietly and electronically controlled without the slightest draught. Once set, the temperature you desire is maintained consistently. And as an option you can even add a microfilter to keep out particles such as dust and pollen.

But this is by no means the only option at your disposal with the BMW 3 Series, since it is our philosophy to offer the customer his very own, personal car. Just talk to your BMW dealer regarding the special equipment available for the 3 Series.

Quality means lasting value. Today's approach to quality is quite different from the old concepts pursued in the past. The idea which used to prevail was that things must be heavy and "solid" in order to be good. But that was yesterday. Today we start out by analysing the load a component has to take. Applying the finite element method, we determine the strongest design with the lowest weight right from the start in the development phase, and then choose the strongest metal alloy. So that genuine quality starts right from the outset in the computers of our Research and Development Division. And ends not as a burden to the environment, but rather in the efficient recycling of our cars.

BMW has been a trend-setter in environmental protection for more than 20 years. As a result, a vast majority of all the components on a BMW can already be recycled today. The picture shows the share of recyclable plastic components on the BMW 3 Series.



SERVICE BEFITTING A BMW.

Every BMW is designed and built to give you not only performance and comfort, but also quality and reliability. Plus, of course, sheer driving pleasure for a long, long time.

A major factor contributing to this goal is reliable and economic service, which at BMW starts right from the beginning in the development of a new car.

The "intelligent" Service Interval Indicator. Your BMW 3 Series comes with a sophisticated Service Interval Indicator showing you when your car requires servicing or an oil change next. This depends on your personal style of motoring and not on fixed intervals or a definite mileage. Since frequent cold starts, for example, require different oil change intervals than when driving the car largely for long distances, the Service Interval Indicator can help you save time and money.

Another special feature is the 12-month warranty provided by your BMW dealer on the work done by his highly qualified technicians and on Original BMW Parts. So that in all you have everything you need for happy motoring today and in the future.

The BMW Service Card ensures competent breakdown assistance round the clock throughout Europe. As an example, your car will be recovered and towed free of charge whenever necessary, you receive free hotel accommodation and a rental car. The BMW Service Card comes as a standard feature with every new BMW.

SUNSHINE, DIESEL AND COUPÉ.

The BMW 3 Series is the perfect car in the exclusive compact range for the true individualist. Because where else do you have the choice of so many model variants?

The new Convertible. Combining elegant design with refined performance, the new Convertible comes with an unprecedented range of features and colour combinations for the paintwork itself, the interior and the roof. So that colours can either be matched or used as contrasts. And in the cold season the highly functional aluminium hardtop turns your Convertible into a truly unique coupé.

The 3 Series coupé. Impressive styling in every respect: the long engine compartment lid, frameless windows, glass-covered B-pillars, and the low rear end. An unmistakable coupé throughout — and a 3 Series with supreme performance ensured by two six-cylinders and the 1.8-litre four-cylinder developing 103 kW (140 bhp) at 6000 rpm.

The diesel. The six-cylinder turbodiesel drives like a BMW and leaves all prejudices against the diesel far behind. Because in terms of acceleration, flexibility and top speed it offers the same high standard as the most powerful petrol engines.

Do you want to know more? Just ask your BMW dealer for the Convertible, diesel or coupé brochure. He will also be happy to provide advice on BMW's wide range of special equipment.

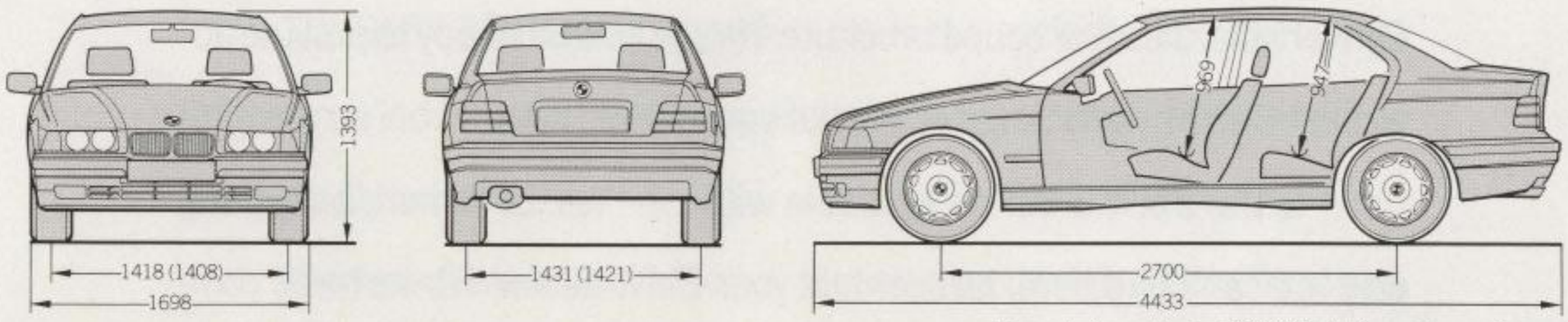
Is the BMW 3 Series available with...? Yes. So if there's anything else you can't find here, just contact your BMW dealer. For he has a complete catalogue of options and special features allowing you to choose exactly what you want for your BMW 3 Series straight from the factory.

ABSOLUTELY UNIQUE MODELS FROM BMW INDIVIDUAL.

BMW Individual is an entirely new concept from BMW. The idea is to offer you even the most exceptional features and colours for your car, thus turning your BMW into your own, very personal automobile produced individually to your requirements. For example with paintwork in "your" particular colour, exclusive fabric or leather upholstery, the very best wooden trimming even in unusual colours, or the most advanced communications technology. Technically sophisticated and finished to the highest standard of craftsmanship. And of course with the quality you rightly expect of BMW.

An example of the particular style of BMW Individual.

SPECIFICATIONS.



Figures in ( ) apply to the 320i/325i. All dimensions are in mm.

		316i	318i	320i	325i
WEIGHT					
Unladen	kg	1190 (1230)	1205 (1245)	1315 [1350]	1330 [1365]
Max permissible	kg	1650 (1690)	1665 (1705)	1775 [1810]	1790 [1825]
Permitted load	kg	460	460	460	460
Permitted axle load front/rear	kg	800/970	810/975	870/1020	875/1030
Permitted roof load	kg	75	75	75	75
Permitted trailer load unbraked/braked*	kg	550/1050	550/1200	600/1400	600/1400
ENGINE					
Cylinders/valves		4/2	4/2	6/4	6/4
Capacity	cc	1596	1796	1991	2494
Stroke/bore	mm	72/84	81/84	66/80	75/84
Max output	kW (bhp)/rpm	73 (100)/5500	83 (113)/5500	110 (150)/5900	141 (192)/5900
Max torque	Nm/ft-lb/rpm	141/104/4250	162/119/4250	190/140/4200	245/181/4200
Output per litre	kW/bhp/ltr	45.7/62.1	46.2/62.8	55.2/75.1	56.5/76.8
Torque per litre	Nm/ft-lb/ltr	88.3/65.1	90.2/66.5	95.4/70.3	98.2/72.4
Compression ratio/fuel grade	:1	9.0/unleaded regular	8.8/unleaded regular	11.0/unleaded premium	10.5/unleaded premium
TRANSMISSION					
Standard gearbox ratios I/II/III	:1	4.23/2.52/1.66	4.23/2.52/1.66	4.23/2.52/1.66	4.23/2.52/1.66
IV/V/R	:1	1.22/1.00/4.04	1.22/1.00/4.04	1.22/1.00/4.04	1.22/1.00/4.04
Final drive ratio	:1	3.45 (4.45)	3.45 (4.45)	3.45 [3.45]	3.15 [3.15]
PERFORMANCE					
Drag coefficient	c_d	0.29	0.30	0.32	0.32
Top speed	km/h	191 (189)	198 (198)	214 [214]	233 [231]
Acceleration 0-100 km/h	sec	13.1 (15.0)	11.5 (12.8)	10.0 [10.9]	8.0 [8.8]
standing-start km	sec	34.1 (36.0)	32.6 (34.0)	30.9 [32.1]	28.4 [29.5]
Flexibility 80-120 km/h in 4th gear (standard gearbox)	sec	13.1	11.0	10.2	8.4
FUEL CONSUMPTION**					
5-speed standard gearbox					
90 km/h	ltr/100 km	6.1 (6.3)	6.4 (6.6)	6.8 [6.1]	6.6 [6.0]
120 km/h	ltr/100 km	7.5 (7.8)	7.8 (8.1)	8.3 [7.7]	8.0 [7.4]
City traffic	ltr/100 km	10.2 (11.0)	10.6 (11.2)	11.4 [12.1]	11.9 [12.3]
WHEELS					
Tyre dimensions		185/65 R 15 87 H	185/65 R 15 87 H	205/60 R 15 91 V	205/60 R 15 91 V
Wheel dimensions		6 J x 15	6 J x 15	6 1/2 J x 15	7 J x 15
Material		Steel	Steel	Steel	Light alloy
ELECTRICAL SYSTEM					
Battery capacity	Ah	46	50	65	65
Alternator output	A/W	70 (80)/980 (1120)	70 (80)/980 (1120)	80/1120	80/1120

* With a max gradient of 12%.
** Fuel consumption to DIN 70030, Part 1.
Unladen weight applies to vehicles in standard trim.

Special equipment may increase this figure.
Figures in ( ) apply to vehicles with 4-speed automatic transmission.
Figures in [ ] apply to vehicles with 5-speed automatic transmission.

TECHNOLOGY GUIDE.

Every BMW consists of a great many parts and components — and each individual item is the result of years of research and development before it is ready for production. The often quite astounding technology that has gone into such parts and components is then reduced to just one simple technical term or abbreviation. Since it would be a pity if this simplified terminology created any unclarity or misunderstandings, we would like to take this opportunity to explain a number of essential features, some of which are optional, others fitted as standard.

Anti-knock control

Cylinder-specific anti-knock control monitors the combustion process in the engine. Any operating conditions possibly detrimental to the engine are determined in good time and knocking is prevented by modifying the ignition. This allows the engine to run at a compression ratio very near the knock limit without the slightest risk, the result being greater fuel efficiency and, consequently, improved fuel economy. Another feature of cylinder-specific anti-knock control is that it allows you, whenever necessary, to fill up the tank with inferior fuel without harming the engine.

Automatic Stability Control + Traction (ASC + T)

The purpose of ASC+T is to prevent the drive wheels from spinning in critical situations, thus ensuring maximum driving stability on the road. As soon as a drive wheel is about to spin, Automatic Stability Control (ASC) intervenes in the engine management and reduces drive power by immediately moving back the throttle butterfly and adjusting the ignition timing. Traction Control (T) then acts additionally on the brakes to reduce wheel spin even more efficiently. Without the driver operating the brakes himself, the drive wheel about to spin is slowed down by the brake and wheel slip is eliminated. Since brake force is applied individually on the left and right wheel, depending on specific requirements, ASC+T also acts as a fully controlled limited-slip differential with locking action from 0 to almost 100%. As a result, ASC+T offers maximum driving stability, optimum traction and, accordingly, an even higher standard of safety and driving comfort.

Check/Control

Check/Control supervises the proper function of all major features and bulbs on the car and shows the driver their condition or, respectively, any deviation from their proper operation. An important innovation is that Check/Control also monitors and displays major lamp functions when not in use. Defect information is displayed in alphanumeric characters by means of a dot matrix, and is accompanied by a sound signal. The information provided in this way is subdivided into three priority levels depending on its significance.

Digital Motor Electronics (DME)

Digital Motor Electronics used by BMW on petrol-engined models represents the latest state of the art in advanced engine management. Maintaining absolute precision, DME controls and supervises all engine functions such as the ignition, fuel injection, oxygen sensor and numerous other operations. Accordingly, it ensures optimum power and performance combined with superior fuel economy and low emissions under all running conditions.

EH automatic transmission

EH automatic transmission conveys engine power to the transmission hydraulically (and not by means of a mechanical clutch, as in the case of a manual gearbox). Depending on current driving conditions, gears are shifted automatically by the electronic/hydraulic (EH) control. This sophisticated unit also allows the driver to choose between a particularly sporting and dynamic or a very economical style of motoring. Designed for active driving, the five-speed automatic transmission shifts back by itself also at higher speeds in order to keep acceleration times as short as possible. Another feature of this five-speed automatic transmission is its special winter driving program shifting up gears at an early point in order to allow sensitive motoring on a slippery surface. Position M on the four-speed automatic transmission of the 316i and 318i retains the gear selected by the driver, allowing you for example to start off smoothly in third gear on slippery surfaces.

Energy Control

At speeds over 20 km/h, Energy Control keeps the driver exactly informed of his car's current fuel consumption, in this way urging him to save fuel and resources. The analogue-face display is integrated in the rev counter.

On-board computer

The on-board computer offers the driver helpful information on request, such as his average road speed, the outside temperature, average fuel consumption or range on the fuel remaining in the tank, the distance to his destination and a specific speed limit to be observed. It also ensures greater safety, for example by warning the driver of black ice or safeguarding the vehicle from theft by a special personal code. Other functions of the on-board computer are the timer, clock and date display. Whenever necessary, information may be retrieved directly while driving by remote control from the steering wheel.

On-board diagnosis

On-board diagnosis is a function of Digital Motor Electronics. Its task is to recognise deficiencies at an early point in time before they can do any damage. Signals indicating impending or sudden defects are memorised electronically and can then be displayed visibly on the Service Tester screen at the workshop for exact evaluation. This substantially facilitates troubleshooting and reduces costs to a minimum.

Service Interval Indicator

To make allowance for the customer's individual style of driving, BMW has abolished the usual fixed, mileage-dependent service and inspection intervals. Instead, the need for service is determined as a function of load- and use-related criteria, the exact time of service being shown by the Service Interval Indicator.

Solid-state distributor system

The solid-state distributor system features a separate ignition coil for each cylinder and spark plug. This innovative technology replaces the conventional concept with one single coil and distributor for all cylinders.

Two-mass flywheel

The two-mass flywheel makes sure that even the most minute, technically unavoidable unsmoothness in torque caused by the engine's firing pulses (particularly at very low idle speeds) is not conveyed by the engine to the transmission and from there to the passenger compartment.

Variable camshaft control (VACC)

The variable camshaft control (VACC) of the six-cylinder power units adjusts the intake camshaft by 12.5° depending on engine speed and accelerator position. Controlled by DME and using hydraulic/mechanical actuators, VACC keeps the intake valves closed longer at low speeds in order to improve idling quality and engine smoothness. At medium speeds, on the other hand, the intake valves open earlier to provide far higher torque and full recirculation of exhaust gas within the engine serving to optimise fuel economy and improve emission control. At high speeds the intake valves are again opened at a later point to provide maximum engine output for supreme performance.

STANDARD EQUIPMENT OF THE BMW 3 SERIES SALOONS.

Engine

Water-cooled four-cylinder four-stroke in-line engine, longitudinally mounted and inclined, light-alloy cylinder head, crossflow principle, spherical combustion chambers, overhead camshaft running in five bearings, hydraulic valve play compensation, crankshaft running in five bearings with 8 counterweights.

Digital Motor Electronics with electronic grid-controlled and air volume-metered fuel injection and ignition, automatic choke, fuel supply with overrun control, self-learning idle speed control, on-board diagnosis with failsafe running functions. Hydraulic engine mounts. Spark plug leads protected from damage.

Full compliance with US emission standards provided by fully controlled three-way catalytic converter and heated oxygen sensor for 91 ROM unleaded fuel. Activated carbon filter with controlled tank purge.

From 320i (deviating from above): Six-cylinder four-stroke in-line engine, cylinder head with four valves per cylinder, overhead camshafts with 7 bearings, variable camshaft control (VACC), crankshaft running in 7 bearings with 12 counterweights. Digital Motor Electronics with solid-state distributor system, ignition current signal, hot-film air mass metering and cylinder-specific knock control. Engine running on 95 ROM unleaded premium fuel. Oval tailpipe.

325i: Exhaust system with two catalyst pipes in parallel monolithic arrangement and dual oval tailpipes.

Transmission/Suspension

Standard drive: engine at the front, power transmission to rear wheels. Weight distribution when unladen approximately 50:50 on front and rear axle. Five-speed gearbox with direct transmission in 5th gear.

Single-joint spring strut front axle with anti-dive and anti-roll bar. Central-arm rear axle with anti-squat and anti-dive. Gas pressure shock absorbers. Steering with variable transmission ratio, power steering, safety steering column.

Asbestos-free clutch and brake linings, disc brakes at the front, drum brakes at the rear. Anti-lock brake system (ABS).

From 318i: Anti-roll bar at the rear.

From 320i: Separate spring/shock absorber mountings at the front, disc brakes front and rear, inner-vented at the front, handbrake acting mechanically via additional drum brake on rear wheels.

325i: Two-mass flywheel on manual gearbox model.

Bodywork

Four-door saloon, extremely rigid all-steel unitary bodywork welded to the floor assembly, torsionally rigid safety cell on all planes, crumple zones with predetermined deformation, crumple units at the front, integrated roof crossbar, plastic tank housed beneath rear seat bench, tank capacity 65 ltr.

Hollow cavity preservation, underfloor protection, front wheel arches with plastic inserts, 6-year warranty against rust perforation.

The models illustrated in this brochure show the specifications for the German market. In part, they include optional equipment and accessories not fitted as standard. According to the specific requirements of other markets, alterations in models, standard and optional equipment, as described in the text and illustrations, may occur. For precise information, please contact your BMW importer or dealer. Subject to change in design and equipment.

Exterior features

All-round parking protection through wrap-around bumpers and side strips. Front and rear bumpers regenerating fully to their original shape in impacts up to 4 km/h. Rear-hinged engine compartment lid rising up towards part-covered windscreen wipers. Engine compartment and luggage compartment lids supported when open by gas-pressure springs. Luggage compartment loading sill extending down to bumper level.

Green heat-insulating glass all round with laminated windscreen. Windscreen and rear window bonded flush with car body. Screw-in towing hook with covered connection points.

Aerodynamically styled rear-view mirrors. Lockable fuel tank filler cap with one key for all locks and holder in tank flap.

From 318i: Central locking with anti-theft security lock, crash sensor and master key with micro-torch.

Interior features

Lockable, illuminated glove compartment. Storage space in front of stickshift/automatic transmission selector lever, on the propeller shaft console and in storage boxes on the front doors. Additional storage space replacing ashtray as an option on non-smoker model. Armrests on the doors with integral closing handles. Vanity mirror for driver (with slide cover) and front passenger. Illuminated push button ashtray and cigar lighter at the front, push button ashtray for rear-seat passengers in propeller shaft console. Gearshift lever knob with integral gearshift pattern. Anti-dazzle safety-design rear-view mirror.

Fully reclining front seats with fine backrest adjustment. Driver's seat adjustable for height, simple fore-and-aft seat adjustment. Dotted-pattern velour flock cloth upholstery on the main seat section and uni mohair flock upholstery on side paddings and seat bottoms. Plastic seat panel and backrest cover, door inserts in uni fabric. Full velour carpeting of entire floor. Front headrests adjustable for height and angle.

Airbag steering wheel, inertia-reel seat belts at the front with mechanical belt latch tensioner and belt retainer. Manual adjustment of belt anchorage point on the B-pillar. Ergonomic belt system at the rear with belt latches at the outside.

Toolbox in luggage compartment lid, spare wheel beneath luggage compartment floor, luggage compartment illuminated and with padded edges for safe loading. Luggage compartment capacity 435 ltr/15.2 cu ft (to VDA standard). Lashing points in luggage compartment. Warning triangle and first-aid kit integrated in luggage compartment storage box.

From 320i: Lining on luggage compartment lid, all-round fabric lining.

325i: Airbag steering wheel rim in leather.

Electrical system

Twin halogen headlights, low-beam headlights in ellipsoid technology, typical BMW headlight look with separate parking lights switched on together with low beams and dual rear lights, headlight units beneath glass cover, electrically operated headlight range control, rear fog warning lights, two reversing lights, analogue instruments with anti-dazzle illumination. Clock, fuel gauge, coolant temperature gauge, LC display trip counter. Service Interval Indicator. Controls and instruments in semi-circular layout around the driver. LIGHTS ON? warning. Rear-view mirrors adjustable electrically from inside. Heated rear window. Aerial integrated in rear window without requiring an amplifier. Ventilation with temperature control, multi-stage radial blower. Heater output geared to road speed by electronic control. Twin-tone horn.

From 318i: Rev counter with Energy Control, analogue-face clock in centre console. Courtesy lights with automatic delay function and soft on/off dimming.

325i: Foglamps in landscaped-surface technology. Multi-Information Display with Check/Control (alphanumeric display), separate digital clock with date display in centre console and central warning light in instrument panel. Electric window lifts at the front with touch control and safety function on the driver's side.

PAINTWORK AND UPHOLSTERY.

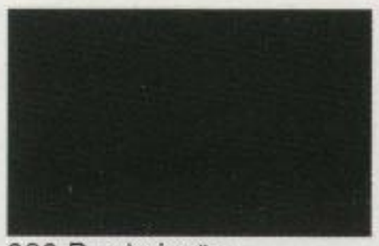
Standard paintwork

218 Alpinweiss


329 Vulkangrau


668 Schwarz


263 Dunkelblau


289 Dunkelgrün


308 Brillantrot

Metallic paintwork


244 Sterlingsilber


237 Granitsilber


181 Diamantschwarz


280 Gletscherblau


287 Mauritiusblau


266 Lagunengrün


301 Kaschmirbeige


252 Calypsorot


259 Brokatrot

Cloth upholstery


0468 Pergament


0466 Silbergrau

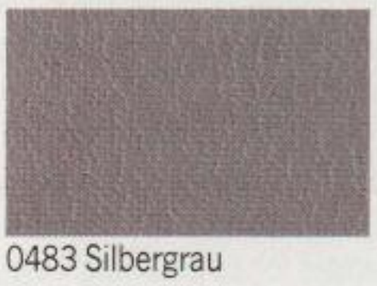

0467 Ultramarin


0465 Anthrazit

Leather upholstery


0396 Pergament


0394 Silbergrau hell


0483 Silbergrau


0395 Ultramarin


0203 Schwarz

● recommended ▽possible

Model	Interior		Code No	Standard paintwork						Metallic paintwork								
				Dunkelblau 263	Alpinweiss 218	Brillantrot 308	Dunkelgrün 289	Vulkangrau 329	Schwarz 668	Diamantschwarz 181	Granitsilber 237	Sterlingsilber 244	Calypsorot 252	Brokatrot 259	Lagunengrün 266	Gletscherblau 280	Mauritiusblau 287	Kaschmirbeige 301
316i 318i 320i 325i	*Cloth*	Anthrazit	0465	▽	▽	●	▽	▽	●	●	●	●	●	▽	▽	▽	▽	●
		Silbergrau	0466	●	▽	▽	▽	●	●	●	●	●	●	▽	▽		●	
		Ultramarin	0467	▽	●						▽	●				●	▽	
		Pergament	0468	▽	▽	▽	●	●	▽	▽			▽	●	●		▽	▽
	Bison leather with natural grain	Schwarz	0203	▽	▽	●	▽	▽	▽	●	●	●	●	▽	▽	▽	▽	●
		Silbergrau	0483	●	▽	▽	▽	●	●	●	●	●	●	▽	▽		●	
		Silbergrau hell	0394	●	▽	▽	▽	◐	◐	●	●	▽	◐	▽	▽		●	
		Ultramarin	0395	▽	◐						▽	●				●	▽	
		Pergament	0396	▽	▽	▽	●	◐	▽	▽			▽	◐	◐		▽	▽

These are the various upholstery and paintwork options available for the BMW 3 Series saloons (metallic paintwork and leather at extra cost). The interior colours are harmoniously matched both for cloth and leather upholstery. Since colours printed on paper cannot properly render the true colour of paintwork and upholstery, we advise you to examine the original colours at your BMW dealership. Please see the table for possible combinations of paintwork and upholstery on all models. Subject to change.

THE ULTIMATE DRIVING MACHINE

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